

**1st Circular for Conference on
Technology and Instrumentation in Particle Physics 2011
(January 13, 2011)**

The conference on Technology and Instrumentation in Particle Physics (TIPP) will take place June 9-14, 2011 at the Sheraton Hotel and Towers in downtown Chicago, Illinois, USA. This conference is the second in a series sponsored by IUPAP that started in 2009 at Tsukuba, Japan. As at this previous, very successful conference, the TIPP 2011 conference will focus on all areas of detector development and instrumentation in particle physics and its closely related fields, such as nuclear physics, particle astrophysics, synchrotron radiation sources and applications in biology, medicine and engineering.

The technical requirements necessary to exploit new opportunities in these fields of science continue to grow. New detector technologies as well as improvements to existing techniques are required in order to address the physics questions we face in the next decade. It is increasingly important for the field to form partnerships that may lead to transformational new technologies. This medium-sized conference brings together experts from the scientific and industrial communities to discuss current work and to plan for the future. The conference will include plenary invited talks and parallel tracks with contributions outlining state-of-the-art developments in the areas of, to name a few:

- Silicon based ionization detectors
- Vertically integrated ASIC structures
- High speed waveform digitizers and data acquisition
- Optical and infrared data links
- High speed, high bandwidth real time online data processing
- High performance photon detectors
- Crystal development for energy measurements
- Gaseous particle counters
- Neutron detectors
- Cryogenic liquid detectors
- Scintillator developments
- Applications in medical imaging and homeland security

Each parallel track will conclude with a forward-looking talk on future opportunities for "disruptive technologies".

The first day of the conference will conclude with a tribute to Georges Charpak, who revolutionized the field of particle detectors. This is followed by a reception. We have set aside Sunday, June 12 for participants to interact on their own or explore the exciting city of Chicago. The conference banquet will be held in the Mid-America Club, high above the city. There will be two poster sessions combined with a vendor exhibit. A prize for the best poster will be awarded. In addition, three courses will be offered for young scientists on the topics of silicon detectors, neutrino detectors and the fundamentals of electronics. We especially encourage young physicists and scientists from underrepresented countries to attend. Limited financial support is available.

Registration for the conference is now open. Abstracts can be submitted for oral or poster presentations. Please note that the deadline for abstract submission is April 1st, 2011. The abstracts will be evaluated as they come in. We encourage all researchers interested in these topics to look at the conference website for more details:

<http://conferences.fnal.gov/tipp11/>

We are looking forward to seeing you in Chicago!

Marcel Demarteau (Argonne National Laboratory)
Ted Liu (Fermi National Accelerator Laboratory)

for the Local Organization Committee